

REMARKS

This is intended as a full and complete response to the Office Action dated February 26, 2003, having a shortened statutory period for response set to expire on May 26, 2003. Please reconsider the claims pending in the application for reasons discussed below.

As a preliminary matter, the Examiner is advised that a petition under 37 CFR §1.78(a)(3) to claim priority to prior-filed copending nonprovisional applications 09/350,210, 09/350,212 and 09/614,406, which issued as U.S. 6,267,853, U.S. 6,516,815 and U.S. 6,494,219, respectively, has been filed simultaneously with this response. A copy of the petition is attached to this office action for the Examiner's convenience. Further, in accordance with 37 CFR §1.78(a)(3) and the reference requirement set forth in 37 CFR §1.78(a)(2), Applicants have amended the specification to insert priority claim text into the instant application. Entry and consideration of the amendment is respectfully requested.

The Examiner has restricted the application to one of the following groups under 35 U.S.C. §121:

- I. Claims 1-13, drawn to an apparatus, classified in class 156, subclass 345.11.
 - II. Claims 14-18, drawn to a process, classified in class 216, subclass 92.
 - III. Claims 19-22, drawn to a system, classified in class 156, subclass 345.11.
- Claims 1-22 are pending in the application. Claims 1-13 stand rejected. Claims 14-22 have been canceled from consideration, without prejudice. Applicants confirm the election of claims 1-13 with traverse.

Claims 1-5, 9 and 10 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Dordi, et al.* (WO 00/32835). The Examiner has taken the position that *Dordi, et al.* teaches each and every element recited in claims 1-5, 9 and 10. Applicants traverse the rejection and respectfully submit that *Dordi, et al.* is not properly used as a §102(e) prior art reference as of its filing date. As required under §102(e), a PCT publication must designate the U.S. to qualify as §102(e) prior art. *Dordi, et al.* does not designate the U.S., and therefore, may not properly be used as a §102(e) prior art

reference. As such, reconsideration and withdrawal of the rejection of claims 1-5, 9 and 10 is respectfully requested.

However, Applicants note that *Dordi et al.* may be valid as prior art as of its publication date, and therefore, in the interest of efficiency, this response will also address the possible application of *Dordi et al.* as a §102(a) rejection. To that end, Applicants note that amended claims 1-5, 9 and 10 include a plurality of cooperatively movable nozzles configured to apply an etchant solution to both the front side and backside of the substrate. Applicants submit that *Dordi, et al.* does not teach, show, or suggest nozzles that move cooperatively to dispense an etchant solution onto both sides of the substrate. *Dordi, et al.* teaches upper and lower nozzles that are either individually positioned or may be moved independently by linear actuators, but the upper and lower nozzles are not configured to move cooperatively to dispense an etchant solution onto both the front and backside of the substrate, as recited in Applicants claims. Claim 1 recites, in pertinent part, a plurality of cooperatively movable etchant dispense nozzles configured to dispense an etchant onto the front side and backside of the substrate, whereas *Dordi, et al.* does not teach, show, or suggest nozzles that move cooperatively to dispense an etchant solution onto both sides of the substrate. As such, Applicants respectfully request allowance of claim 1, along with claims 2-5, 9 and 10, which depend therefrom.

Claims 6 and 11-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Dordi, et al.* in view of *Nayak, et al.* (EP 1136592). The Examiner has taken the position that the combination of *Dordi, et al.* and *Nayak, et al.* teaches each and every limitation in Applicants' claims 6 and 11-13. Applicants traverse the rejection and respectfully submit that *Nayak, et al.* is not properly applied as a §103(a) reference, as a European Patent Application is only valid as prior art to support a rejection as of its publication date. In this case, *Nayak's* publication date (September 26, 2001) is after Applicants' filing date (February 16, 2001), and as such, Applicants respectfully request withdrawal of the rejection of claims 6 and 11-13.

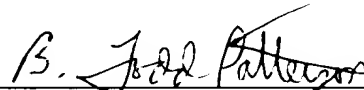
Claims 7, 8 and 11-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Dordi, et al.* in view of *Stevens, et al.* (U.S. Patent No. 6,516,815). The Examiner has taken the position that the combination of *Dordi, et al.* and *Stevens,*

et al. teaches each and every limitation in Applicants' claims 7, 8 and 11-13. Applicants respectfully submit that this is not a proper rejection because *Stevens, et al.*, is disqualified as §102(e) prior art under 35 U.S.C. §103(c). Please see the attached Statement of Common Ownership. Applicants respectfully request withdrawal of the rejection of claims 7, 8 and 11-13.

In conclusion, the references cited by the Examiner, neither alone nor in combination, teach, show, or suggest the apparatus of the present invention. Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not deemed necessary for a full and complete response to this office action. Accordingly, allowance of the claims is respectfully requested.

Respectfully submitted,



B. Todd Patterson
Registration No. 37,906
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd., Suite 1500
Houston, Texas 77056
(713) 623-4844
ATTORNEY FOR APPLICANT

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) An integrated bevel cleaning (IBC) apparatus, comprising:

a transfer position where a substrate is positioned [for processing and where a substrate is positioned after processing];

a rinse position where the substrate is rinsed; [and]

an etch position where the [substrate] edge of the substrate [bead] is [removed] cleaned; [and]

an actuator for positioning the substrate in the transfer position, the rinse position and the etch position; and

a plurality of cooperatively movable etchant dispense nozzles configured to dispense an etchant onto the front side and backside of the substrate.

4. (Amended) The IBC apparatus of claim 1 further comprising at least one rinsing nozzle located proximate [said] the rinsing position for rinsing at least an edge region of the substrate.

5. (Amended) The IBC apparatus of claim 4 wherein [said] the at least one rinsing nozzle [is] comprises a plurality of rinsing nozzles positioned to rinse [both sides] the front side and backside of the substrate.

6. (Amended) The IBC apparatus of claim 1 [wherein said transfer position is accessible by] further comprising at least one slit valve located proximate the transfer position.

7. (Amended) The IBC apparatus of claim 1 wherein [said] the actuator comprises a spindle assembly for retaining [a] the substrate and rotating the substrate, and a linear actuator for raising and lowering [said] the spindle assembly.

8. (Amended) The IBC apparatus of claim 7 wherein [said] the spindle assembly comprises a vacuum chuck.

9. (Amended) The IBC apparatus of claim 1 [further comprising] wherein the plurality of etchant dispense nozzles are coupled to at least one etchant [dispenser] dispensing arm assembly positioned proximate the etch position to apply etchant to the front side and backside of the substrate.

10. (Amended) The IBC apparatus of claim 9 wherein [said] the etchant is applied to an edge exclusion zone of [said] the substrate.

11. (Amended) The IBC apparatus of claim 9 wherein [said] the at least one etchant [dispenser] dispensing arm assembly is rotatable into a position near the substrate and away [from] from the substrate.

12. (Amended) The IBC apparatus of claim 11 wherein [said] the at least one etchant [dispenser] dispensing arm assembly [is at least three] comprises a plurality of etchant [dispenser arms] dispensing arm assemblies.

13. (Amended) The IBC apparatus of claim 12 wherein [said] the [at least three] plurality of etchant [dispenser arms] dispensing arm assemblies are cooperatively coupled [to a single motor] for simultaneously rotating the [at least three] plurality of etchant [dispenser arms] dispensing arm assemblies into a position near the substrate and away from the substrate.